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OSU-AGRANI BANK RURAL DEPOSIT MOBILIZATION EXPERIMENT

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Abstract

Three models of incentive mechanisms to mobilize rural bank deposits were experimented with between February 1, 1986 and April 30, 1986 in three branches in each of two regions in Bangladesh. One model, the Tangible Incentive Model, was designed to test tangible incentives given to depositors, in addition to the normal interest income, for opening a new account or adding to an existing account and maintaining in those accounts an additional deposit of Tk. 500 or more for at least 90 days. Prize bonds valued at one percent of the eligible deposit balance were given to the depositors. Another model, the Marketing Model, was designed to test the impact of cash incentives paid to two specially appointed Field Assistants in the branch for marketing of bank deposits. The Field Assistants were paid Tk. 150 per month for incidental expenses, and an incentive bonus of one percent of eligible deposits mobilized of Tk. 1000 or more, and 10 or more accounts opened or reactivated. The third model, Employee Incentive Model, was designed to test additional financial incentives given to existing branch staff beyond the benefits currently provided. The branch staff, except the Manager, received the same incentive bonus and at the same rate as the Field Assistants in the Marketing Model.

Over 800 new accounts were opened or dormant accounts reactivated in the six branches through the experiment. Total deposits of Tk. 1.4 billion were mobilized by these accounts. These deposits ranged from one percent to over eight percent of the branch's existing deposit base. The increase in number of accounts ranged from over one-half of one percent to almost thirteen percent of the branch's existing number of accounts.

The Tangible Incentive Model produced the most cost effective result in generating new deposits and deposit accounts at the lowest cost per taka or per account mobilized. This model clearly shows that rural deposits can be mobilized by direct incentives. The overall implication of the experiment is that banks can mobilize rural deposits if serious efforts are made to reach this objective with appropriate incentive schemes.

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I. INTRODUCTION

After decades of neglect by policy makers and researchers in low income countries (LICs) and in international development agencies, there is finally an upsurge of interest in savings mobilization, particularly in rural areas, by formal financial institutions (Vogel and Burkett). Earlier efforts in rural finance focused mainly on developing agricultural finance systems that emphasized credit delivery and neglected the other half of financial intermediation, i.e. deposit mobilization (Adams; Vogel). Those efforts, financed mainly through international donor funded programs, have contributed to the development of the formal financial infrastructure in LICs, albeit with some serious problems of viability (Meyer). The inability of many financial institutions to operate without continuous injections of subsidized foreign assistance has demonstrated the urgency of domestic resource mobilization. Savings have become increasingly important because of the declining trend in foreign assistance in recent years. Several programs and experimental projects are currently underway in many LICs to foster domestic resource mobilization, particularly deposit mobilization by financial institutions. The focus on rural finance now is not only credit disbursement, but savings mobilization as well.

The importance of mobilizing domestic resources in Bangladesh hardly needs to be emphasized. Financial institutions through their various instruments of deposit mobilization

can play a vital role in increasing domestic savings in the country. The recent growth in the banking system has already contributed significantly to the monetization of the economy and to the mobilization of domestic resources in the form of bank deposits (Ahmed; Khalily, et al.). The increased access to the banking system provided by branch expansion was complemented in 1980 by increases in the real return paid on deposits. These changes have generated a significant increase in deposits, particularly interest earning ones. There are other factors, however, that may also influence deposit growth, such as incentives for efficient bank management and for reaching out to far flung clients. Since interest rate policies are often very rigid in LICs like Bangladesh, new approaches are needed using other forms of incentives to find ways to further increase rural deposits. Some incentives are already given to bank staff to mobilize deposits, but the Bangladesh Bank regulates any kind of formal incentive structure provided to depositors. There is a need for more flexibility for banks to test customer response to non-interest incentives for opening new deposit accounts or increasing existing deposits.

As part of the Bangladesh Bank-USAID Rural Finance Project, The Ohio State University (OSU) collaborated with the Agrani Bank[1] to undertake an experiment designed to test additional incentive mechanisms for rural deposit mobilization. During the experiment, the Agrani Bank staff operated under the bank's normal incentive program for deposit mobilization activities, and the depositors received normal interest income on their deposit balances per the prevailing interest rate structure set by the Bangladesh Bank. The Rural Deposit Mobilization Experiment was conducted between February 1, 1986 and April 20, 1986 in two different regions of Bangladesh: Barisal and Jamalpur. Barisal is considered

to be a more developed and higher income region than Jamalpur. This paper summarizes the findings of the experiment. Appendix I describes the methodology for evaluating the experiment.

II. EXPERIMENTAL MODELS

Three models were tested in each of the districts where the deposit experiments were conducted. One model was used in one of the three branches selected for the experiment in each region. The models were conceived as follows:

Tangible Incentive Model. This model was designed to test special incentives, in addition to interest rates, provided to depositors for opening a new account or adding to an existing account, and for maintaining the additional deposit balance for at least 90 days. Prize bonds valued at one percent of the deposit were given to depositors opening a new account or adding to an existing account for deposit balances of Tk. 500 or more.[2] The maximum bonus a depositor could receive was Tk. 100 by implying a deposit of Tk. 10,000. This model was advertised through word of mouth by regular bank staff throughout the bazaars and schools located in the market area served by the branch. This model, also referred to in the text as Model 1, was tested in Batajore Branch in Barisal and Batikamari Branch in Jamalpur.

Marketing Model. This model offered no additional incentives to the depositors. Rather it tested the impact of marketing activities of two special temporary bank staff hired from the local community. These Field Assistants visited households in the market area to identify which ones had no accounts or only inactive accounts in the branch, and to

encourage them to make deposits in the branch. These Assistants were paid Tk. 150 per month for incidental expenses and were promised a Tk. 10 incentive bonus when they opened 10 new accounts or activated 10 accounts with minimum total deposits of Tk. 1,000. An additional Tk. 10 was paid for each additional Tk. 1,000 mobilized up to a maximum incentive of Tk. 1,000 per Field Assistant per month. This model, referred to in the text as Model 2, was tested in Gournadi branch in Barisal and Pingna branch in Jamalpur.

Employee Incentive Model. This model was designed to test the impact of providing additional financial incentives to existing branch staff beyond those already provided in Agrani Bank's regular employee incentive plans. In this model, the branch staff, except for the manager, received the same incentive bonus given the Field Assistants in the marketing model. The staff were expected to work overtime, in addition to fulfilling their regular responsibilities, to mobilize additional deposits. This model, referred to in the text as Model 3, was tested in Banaripara branch in Barisal and Sarishabari branch in Jamalpur.

III. CHARACTERISTICS OF THE EXPERIMENT AREA

Some of the important economic and financial characteristics of the two districts selected for the experiment are presented in Table 1. Barisal is approximately twice the size of Jamalpur in both GDP and population. Although Jamalpur is generally perceived as being a poorer district, average per capita incomes are reported to be about the same. There is considerable difference, however, in the amount of deposits and advances reported by the rural bank branches. When these amounts are compared to agricultural GDP, it appears that a relatively smaller share of rural income has been mobilized by Jamalpur

banks in the form of deposits but a relatively larger amount of agricultural loans have been provided than in Barisal. Caution must be used in interpreting these results because of the lack of a definitive correlation between agricultural production of households and rural branches.

IV. RESULTS AND COMPARISONS OF THE MODELS

Over 800 new accounts were opened or dormant accounts reactivated in the six branches during the experiment with total deposits of almost Tk. 1.4 billion by these accounts.[3] The mobilization of deposits by these accounts mobilized during the experiment ranged from about one percent to over eight percent of the branch's existing deposit base. The increase in number of accounts ranged from over one-half percent to almost thirteen percent of the branch's existing number of accounts. Generally, the number of new accounts was greater in Barisal than in Jamalpur, and the average size of new account was about three times larger in Barisal.

Nature of Accounts

Table 2 gives the distribution of types of accounts mobilized during the Experiment. As is common among rural depositors, savings accounts with check writing facility were preferred representing about 84 percent of all accounts opened. An interesting feature is the relative popularity of the new instrument, Deposit Pension Scheme (DPS).[4] These results imply that there are clear preferences for various types of accounts and the banking system should focus its marketing activities to meet them. Attempting to market more fixed

deposits among small savers will not likely be an attractive strategy because of the small deposit size and the liquidity needs of the depositors. On the other hand, marketing current accounts is also not likely to yield a favorable response. Savings accounts with checks appear to meet both the depositors' liquidity needs through the check writing facility and income needs from interest income.

Table 3 reports the distribution of accounts by the sex of account holder. Fifty-seven percent of the accounts were opened by females, mostly housewives. The Field Assistants working in the Marketing Model in the Gournadi branch and the Barisal and Pingna branches in Jamalpur were particularly successful in reaching the female population in villages. The Batajore branch testing the Tangible Incentive Models in the Barisal is a unique case because the branch manager developed a special banking program with the female road maintenance staff in a local CARE project. There appears to be a vast potential for marketing financial services to rural women who represent more than 50 percent of the rural population.

Table 4 shows the preferences for types of accounts chosen by the sex of the account holder. A somewhat larger proportion of females selected savings accounts with checking compared to males (88 compared to 77 percent). On the other hand, females opened relatively fewer current, fixed, and savings accounts without checking. It appears that females generally preferred interest bearing deposits.

Type of Depositors

Table 5 shows the distribution of number of accounts by type of depositor as stated by the person in the account application form. As expected from Table 3, housewives comprised the largest group with about 43 percent of the total number of account holders. Surprisingly, students comprised the next major type with about 19 percent of the accounts. The Employee Incentive Model in the Banaripara branch in Barisal and the Sarishabari branch in Jamalpur was effective in soliciting business and government employees' accounts. Table 6 shows that housewives and students had similar preferences for savings accounts with checking facility. Not surprisingly, the largest group that preferred current accounts was businessmen who probably utilized them to pay business expenses.

Size of Deposit Balances

The distribution of accounts by size of Opening Balance is reported in Table 7.[5] In all branches the largest number of accounts were opened by small depositors. In a country with a per capita income of approximately U.S. $130 per year, it is not surprising that deposit size is very small. However, if these data are compared with the Ending Balances at the end of the experiment in April 1986 (Table 8), it can be seen that there were significant deposit activities in all branches. The share of accounts with an Ending Balance of Taka 100 or less declined from 73 percent to 66 percent. This occurred because of increases in the Ending Balances in the higher size categories. The number of accounts in the size interval Tk. 101-500 increased from 11 percent to almost 15 percent of total accounts and the share of accounts with Ending Balances of Tk. 501-1,000 increased to 5.3

percent from 4.1 percent. These data show that the experiment not only introduced new depositors to the banking system but that these new depositors continued to add to their deposits. Furthermore, branch managers, particularly in the Batajore and Batikamari branches, stated that the extensive public contacts made as part of the deposit mobilization drive improved their local image so deposit growth continued even after the experiments were terminated. In other words, banking can be a growing habit. Even if it may be expensive initially to introduce the banking habit to rural households, the one-time expense may be more than offset by future deposits in the branch.

The growth and decline in account size can also be seen in Table 9 which reports the distribution of accounts in each Opening Deposit range by the Ending Balance at the end of the experiment. The data show that 15 percent of the accounts with an Opening Balance of Taka 100 or less ended the period with a higher deposit balance, while the remaining 85 percent remained in the original position. Similarly, 23 percent of the accounts with an Opening Balance size of Taka 101-500 ended with higher balances compared to only 14 percent with lower ending balances. On the other hand, 22 percent of the accounts with an Opening Balance between Taka 501-10,000 ended with balances under Tk. 501.

Number of Transactions

The number of transactions recorded in these accounts after the initial deposit is reported in Table 10. Generally, the number of deposits was far greater than the number of withdrawals. Of a total of 746 transactions, about 70 percent were for additional deposits. An interesting feature is that the larger size accounts had more withdrawals than deposits.

This result is consistent with the data in Table 9 which showed about 20 percent of the accounts over Taka 10,000 ended the experiment with lower balances than they started with at the beginning, while the smaller size accounts ended the experiment with larger deposit balances. The rate of withdrawal in the small accounts during the experiment was far less than in the large accounts (0.16 withdrawals compared to 0.42 withdrawals per account). Thus, it may be inferred that the smaller accounts with increasing deposits over time and with the lowest rate of withdrawal may not be expensive to maintain if their deposit balances increase over time. The middle range accounts (Tk. 501-5,000) seem to be quite expensive for the branch to maintain because of the frequent transactions. These data show that the pursuit of small depositors in the rural sector may not be operationally as expensive as is commonly perceived.

Comparison of Total Deposit Growth with Previous Years

The growth in deposits reported in these experiments reflects the amount attributed to the accounts mobilized during the experiment period. While the number of accounts mobilized at each branch reflected a new addition to the base number at the beginning of the period, the same is not true in the case of the net value of deposits. Deposit balances at each branch had previously shown a seasonal effect, normally peaking at the end of December and declining in the succeeding months until rising again at the end of June of each year. The Monthly Reports of Statement of Affairs of each branch showed that for the period February through April there is generally a decline in overall branch deposit position. This is a pre-harvesting period representing low cash flow among the farmers.

Especially in the poorer Jamalpur region, deposit balances at each branch normally experienced a sharp decline during that period. In the Barisal region, only the rural Batajore branch experienced the similar declining deposit balances during the same period. Table 11 shows the percentage change in total deposit balance of each branch during the period February through April for 1984, 1985, and 1986. The data show that in all but one case (Banaripara) the deposit balance either rose more quickly or fell less sharply in 1986 compared to 1984 and 1985. The net position improved considerably, particularly in the Pingna branch in Jamalpur. In the Batikamari branch, is also improved significantly. Though the change is a negative 0.6 percent, it is far better than the negative 6.6 percent change in balance in the previous year.

Comparison of Models

Tables 12 and 13 summarize the results derived from monitoring the deposits of the accounts mobilized during the experiment for three months in the six participating branches. In estimating the benefits derived from the new deposits mobilized, we assumed that the funds would generate the same rate of return as Agrani Bank's interbranch rate of interest of 12.5 percent as reported by the head office (See Appendix I for Methodology). Overall, Model 1 (Tangible Incentive Model) produced the best results with very high net incremental income and lowest cost of deposit mobilization. Model 2 (Marketing Model) was the least cost effective. The poor results obtained for the marketing model, particularly at the Gournadi branch, appear to be related to two problems. First, the temporary Field Assistants hired for marketing may not have been viewed as regular bank staff by risk-averse

depositors. Secondly, the procedure for paying for the Assistants Tk. 150 per month as incidental expenses was not resolved on a timely basis so the Gournadi Assistants stopped work some time into the experiment. The incentive bonus in Model 2 also seems to be quite high (1 percent per month) to be cost effective. Besides, the Assistants did not get adequate training and support from the Branch staff. On the other hand, the large number of accounts and value of deposits reported in Batajore is due in part to the successful linkage developed between the branch and the participants in the CARE project.

Model 1 (Tangible Incentive Model) at Batajore branch presented the best results in the Barisal region. It had the highest rate of increase in number of accounts (12.75 percent) as well as in volume of deposits (8.65 percent). It had a positive net incremental income with a rate of return of about 1 percent over the total incremental cost of funds mobilized by the experiment. It had the lowest cost per incremental Taka mobilized and per incremental account opened at Tk. 0.002 and Tk. 3.72, respectively. The Gournadi branch with Model 2 (Marketing Model) did not participate very actively in the experiment and produced the poorest results in terms of mobilization of deposit balances and number of accounts. Model 3 (Employee Incentive Model) at Banaripara branch had the highest net incremental profit of Tk. 561 with a rate of return exceeding 8 percent over the total incremental cost of funds mobilized. However, the employees focused on a few new accounts with large deposits balances.

Model 1 at Batikamari branch in Jamalpur produced about a 7 percent growth in incremental number of accounts and an 8 percent growth in incremental deposit balances. It had a new incremental income of Taka 509 with a margin of about 28 percent over the

total incremental cost of funds generated. It had the lowest cost per incremental Taka mobilized and per incremental account opened at Tk. 0.005 and Tk. 4.31, respectively. Model 2 at Pingna, however, generated the highest volume of incremental deposits as well as the highest number of incremental accounts opened. It had the highest growth in incremental account at over 8 percent, but the costs incurred were also very high thereby producing a large net incremental loss. Model 3 at Sarishabari produced the lowest growth in deposits and number of accounts in the region. Model 3 at Sarishabari produced the highest incremental income of Taka 548 with a rate of return of 46 percent. In terms of cost, it closely followed Model 1 at Batikamari with Tk. 0.007 and Tk. 6.66 per incremental taka mobilized and incremental account opened, respectively.

It was impossible to conclusively determine if there was disintermediation[6] from a nearby competing bank branch to the experimental branches. It appeared, however, that for most of the experimental branches the increases in number and/or amount of deposits did not coincide with net declines in number and/or amount of deposits in nearby competing branches. This is especially true of the opening of new accounts in nearby competing branches. This is especially true of the opening of new accounts by the CARE female workers. It was the same with Models 1 and 2 in Jamalpur at Batikamari and Pingna branches, which were located by themselves and where field reports showed that many new depositors opened an account for the first time in their lives.

The objective of the study was to test alternative least cost incentive methods for rural deposit mobilization. It is clear that Model 1, the Tangible Incentive Model, reported the most effective method, while Model 2, the Marketing Model using Field Assistants, did

not prove cost effective at the bonus rate used in the experiment. The hiring of new temporary staff and the bonus structure of 1 percent per month (12 percent annually) is indeed very expensive. A brief review of the depositor profile, however, showed that Model 2 was more successful in bringing in distant clients than were the employees in Model 3 who reached mostly nearby clients.

V. CONCLUSIONS

The three experimental models employed in this research did not operate under equally motivated and competent branch bank managers. This factor may have caused some of the inconsistencies observed across branches. The attitude and skill of the branch manager can play an important role in determining the success of these experiments. It is quite evident, for example, that the branch manager at Gournadi could not motivate the Field Assistants as well as the branch manager did at Pingna branch. On the other hand, field visits revealed that branch managers at Batikamari and Batajore, which employed the Tangible Incentive Model, showed very active involvement through public contacts made to publicize the program and generate depositor interest.

The Tangible Incentive Model produced the most cost effective result in generating new deposits and deposit accounts. This Model, which was employed in the most rural branch in both regions, clearly shows that rural depositors can be attracted by direct incentives.

The Marketing Model did not produce good results in the Gournadi branch mainly due to management problems and so does not provide good evidence on the potential of

the experiment. In the Pingna branch, however, this model reached distant depositors and produced significant growth in new deposits and deposit accounts in addition to the normal growth. The normal quarterly growth rate of accounts between 1984 and 1986 was 4 percent whereas the 3 month growth rate of accounts attributed to the experiment was 8 percent. This model could be made cost effective by trimming costs. The Employee Incentive Model reached mostly nearby clients with the largest average deposits in both regions. With no additional field costs, the model produced a lower cost of generating new deposits than the Marketing Model. However, its impact on reaching distant clients was very minimal.

The overall implications of these experiments seems clear: deposits can be mobilized in rural areas when serious efforts are made by banks to reach this objective with appropriate incentive mechanisms specifically designed for rural areas. Currently, banks provide uniform incentive schemes for deposit mobilization in both rural and urban areas. Uniform incentive schemes may work better in urban areas where a larger amount of deposits is available with less effort, but rural deposit mobilization requires a more target oriented approach by management. Field visits to rural bank branches confirmed that they have to cover a much larger market area than urban branches. Rural areas suffer from extremely poor and slow means of transportation and communication. Rural clients are less sophisticated and need more outreach to accept the banking habit. Furthermore, rural branches are also sparsely staffed compared to the area and number of clients they service. Current employee incentive schemes should be modified, therefore, to provide separate incentive structures for deposit mobilization in urban and rural areas. The rural incentive

scheme should be more attractive than the urban incentive structure. Caution should be taken, however, that it is cost-effective.

Considering these issues, it appears that some variation of the Marketing Model could be an effective mechanism to reach the rural population if the costs could be contained to a manageable limit. Costs could be easily trimmed by using the Field Assistants already employed for loan recovery at the branch level and by offering a more realistic incentive bonus rate. In addition to their current duties for loan recovery, the Ffield Assistants could be assigned deposit mobilization activities with a bonus scheme. The commission (bonus) structure could be reduced from the experimental rate of 1 percent per month to, say, 0.25 percent per month. The incidental expenses of Taka 150 per month per Field Assistant could be eliminated as they are already on the Bank's payroll. Furthermore, by being regular bank staff, these Field Assistants could overcome the wariness of some risk-adverse depositors. A good marketing drive using the existing Field Assistants combined with some elements of the Tangible Incentive Model from time to time should help extend banking services to the rural population.

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1. Agrani Bank is one of the Nationalized Commercial Banks in Bangladesh and has over 800 branches of which 66 percent are rural.

2. Official Exchange Rate: Taka 30.5 = U.S. $1.00 (January-March, 1986).

3. The number of accounts referred to here and in the rest of the paper include those new accounts plus existing accounts with new deposits mobilized during the experiment and do not include all accounts of the branch.

4. The Deposit Pension Scheme (DPS) is a pension oriented fixed deposit instrument for individuals who may not have old age pension plans. Depositors must deposit a fixed sum every month (not less than Tk. 100 or more than Tk. 500) for a fixed term of ten or twenty years. At the end of the term, the depositor may opt to receive a predetermined lump sum payment or equal monthly installments for ten years.

5. For new accounts, opening balance indicates initial deposit. However, for existing accounts the opening balance indicates the deposit balance after the new deposit was made at the start of the experiment.

6. Disintermediation implies drawing down balances in competing branches. In the case of Batikamari and Pingna branches in Jamalpur and Batajore branch in Barisal there were no competing branches within 5 miles of the respective branches. In the case of competing branches for the other experiment branches, they also experienced some increases in total number of accounts and new deposits during the experimental period.

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Table 1

Selected District Characteristics

Item	Barisal	Jamalpur
GDP at Current Market Prices (1983-84 m. taka)	16,096.0	8,438.0
Ag. GDP at Current Market Prices (1983-84 m. taka)	7,821.0	4,783.0
Percent Ag. GDP	48.6	56.7
Population (1983-84 million persons)	5.3	2.7
Per Capita GDP (taka)	2,941.0	2,928.0
Number of Bank Branches	185.0	93.0
Rural Deposits (June 30, 1984; m. taka)	416.7	164.2
Rural Advances Outstanding (June 30, 1984; m. taka)	542.2	640.0
Ratio Rural Deposits/Ag GDP (1983-84; percent)	5.3	3.4
Ratio Rural Advances/Ag GDP (1983-84; percent)	6.9	13.4

SOURCE: Original data obtained from the Statistical Yearbook of Bangladesh; 1984-85, with the exception of the number of bank branches obtained from the Banking Control Department, Bangladesh Bank.

Table 2

Distribution of Accounts by Type of Account

Account Type	Branch[a]						Row Total	Percent
	01	02	03	11	12	13		
Current	7	--	2	9	2	--	20	2.4
Savings with Checking	92	131	74	328	14	67	706	83.5
Savings without Checking	--	--	17	--	3	--	20	2.4
DPS[b]	6	12	--	18	--	23	59	7.0
Fixed	4	1	--	21	--	14	40	4.7
Total	109	144	93	376	19	104	845	100

[a] Branch Names:
01 = Batikamari, Jamalpur; 02 = Pingna, Jamalpur;
03 = Sarishabari, Jamalpur; 11 = Batajore, Barisal;
12 = Gournadi, Barisal; 13 = Banaripara, Barisal

[b] DPS = Deposit Pension Scheme.

Table 3

Distribution of Accounts by Sex

Sex	Branch[a]						Row Total	Percent
	01	02	03	11	12	13		
Male	74	38	84	144	3	20	363	43
Female	35	106	9	232	16	84	482	57
Total	109	144	93	376	19	104	845	100

[a] See Table 2 for branch names.

Table 4

Distribution of Accounts by Type of Account and Sex of Accountholder

Sex	Current	Savings with Checking	Savings without Checking	DPS	Fixed	Row Total
Male	17	281	14	36	35	363
Female	3	425	6	33	15	482
Total	20	706	20	59	40	845

Table 5

Distribution of Accounts by Type of Depositor

Depositor Type	Branch						Row Total	Percent
	01	02	03	11	12	13		
Farmer	13	14	5	12	3	18	65	7.7
Govt. Employees	21	11	36	29	2	5	104	12.3
Businessmen	4	5	29	36	4	40	118	14.0
Joint Acct.	1	1	3	--	1	2	8	0.9
Cooperative	--	--	--	5	--	1	6	0.7
Student	44	10	10	70	6	21	161	19.1
Housewife	21	103	6	217	2	12	361	42.7
Other	5	--	4	7	1	5	22	2.6
Total	109	144	93	376	19	104	845	100

[a] See Table 2 for branch names.

Table 6

Distribution of Accounts by Type of Account and Type of Depositor

Sex	Current	Savings with Checking	Savings without Checking	DPS	Fixed	Row Total	Percent
Farmer	1	46	1	8	9	65	7.7
Govt. Employees	1	86	2	8	7	104	12.3
Businessmen	10	70	6	24	8	118	14.0
Joint Acct.	1	4	1	--	2	8	0.9
Cooperative	--	6	--	--	--	6	0.7
Student	2	152	4	1	2	161	19.1
Housewife	1	333	3	16	8	361	42.7
Others	4	9	3	2	4	22	2.6
Total	20	706	20	59	40	845	100

Table 7

Distribution of Accounts by Opening Balance

Opening Balance	Branch[a]						Row Total	Percent
	01	02	03	11	12	13		
Tk. 100 or Less	85	121	63	291	7	51	618	73.1
Tk. 101 - 500	13	9	14	35	4	16	91	10.8
Tk. 501 - 1,000	2	5	5	17	2	4	35	4.1
Tk. 1,001 - 5,000	6	6	7	22	4	11	56	6.6
Tk. 5,001 - 10,000	3	-	2	2	-	12	19	2.3
Tk. over 10,000	--	3	2	9	2	10	26	3.1
Total	109	144	93	376	19	104	845	100

[a] See Table 2 for branch names.

Table 8

Distribution of Accounts by Ending Balance

Ending Balance	Branch[a] 01	02	03	11	12	13	Row Total	Percent
Debit	2	--	--	4	--	1	7	0.8
Tk. 100 or Less	74	111	56	268	10	34	553	65.4
Tk. 101 - 500	18	17	17	42	2	28	124	14.7
Tk. 501 - 1,000	4	4	5	26	--	6	45	5.3
Tk. 1,001 - 5,000	8	8	13	23	4	13	69	8.2
Tk. 5,001 - 10,000	2	1	1	2	--	10	16	1.9
Tk. over 10,000	1	3	1	11	3	12	31	3.7
Total	109	144	93	376	19	104	845	100

[a] See Table 2 for branch names.

Table 9

Distribution of Accounts by Opening Deposit and Ending Balances

Opening Balance	Ending Balance (TK)						Row Total	Percent
	100 or less	101-500	501-1,000	1,001-5,000	5,001-10,000	over 10,000		
100 or less	526	60	13	15	--	4	618	73.1
101-500	13	57	12	7	--	2	91	10.8
501-1,000	6	4	19	5	--	1	35	4.1
1,001-5,000	11	1	1	42	--	1	56	6.6
5,001-10,000	1	1	--	--	15	2	19	2.3
over 10,000	3	1	--	--	1	21	26	3.1
Total	560	124	45	69	16	31	845	100

Table 10

Number of Transactions by Size of Opening Balance

Opening Balance (TK)	Number of Accounts	Number of Transactions		Average per Account	
		Deposits[a]	Withdrawals	Deposits[a]	Withdrawals
100 or less	618	365	99	0.59	0.16
101-500	91	90	39	0.99	0.43
501-1,000	35	21	22	0.84	0.63
1,001-5,000	56	36	48	0.64	0.86
5,001-10,000	19	3	7	0.15	0.37
over 10,000	26	5	11	0.19	0.42
Total	845	520	226	0.61	0.27

SOURCE: Appendix II, III

[a] Excludes initial deposit transaction when account was opened.

Table 11

Percentage Change in Total Deposit Balance of Branches Between February 1 and April 30 of Each Year

	Branch[a]					
Year	01	02	03	11	12	13
1984	-20.8	-6.8	-30.1	-9.4	9.0	10.1
1985	-0.6	-7.5	-28.8	-2.8	8.5	23.8
1986	-0.6	12.5	-23.3	-1.0	11.9	22.5

[a] See Table 2 for branch names.

Source: Monthly Statement of Affairs of each branch.

Table 12

Financial Comparison of the Three Experimental Models
February 1, 1986 through April 30, 1986
Region: Barisal

Item	Tangible Incentive Model (Batajore)	Marketing Model (Gournadi)	Employee Incentive Model (Banaripara)
1. Number of incremental accounts	376	19	104
2. Total number of existing accounts at beginning of experiment	2,950	4,270	3,903
3. Percent incremental accounts	12.75	0.44	2.66
4. Amount of incremental deposits (Tk. 000)	591	62	395
5. Average size of incremental deposits (Tk. 000)	1.57	3.26	3.79
6. Total value of deposits at beginning of experiment (Tk. 000)	6,835	10,248	6,608
7. Percent incremental deposits	8.65	0.6	5.98
8. Interest receivable on incremental monthly produce (Tk. 000)	1,461	87	712
9. Incremental interest receivable (Tk.)	15,216	902	7,414
10. Interest payable on incremental monthly product (Tk. 000)	1,390	67	312
11. Incremental interest payable (Tk.)	13,660	588	3,729
12. Net Interest Income (8-10) (Tk.)	1,556	314	3,685
13. Incentive bonus paid (Tk.)	1,397	325	3,124
14. Field Assistant's incidental expenses (Tk.)	---	600	---
15. Net incremental income (loss) (Tk.)	159	(611)	561
16. Rate of return (%)	1.06	40.38	8.19
17. Incentive cost per incremental Taka mobilized (excludes interest costs) (Tk.)	0.002	0.015	0.008
18. Incentive cost per incremental account mobilized (excludes interest costs) (Tk.)	3.72	48.68	30.04

[a] At the beginning of workday on February 1, 1986.

[b] Assuming Agrani Bank's annual rate of interest on interbranch funds: 12.5%.

[c] Rate of return = (net incremental income/total incremental costs) * 100.

Table 13

Region: Jamalpur

Item	Tangible Incentive Model (Batikamari)	Marketing Model (Pingna)	Employee Incentive Model (Sarishabari)
1. Number of incremental accounts	109	144	93
2. Total number of existing accounts at beginning of experiment	1,597	1,792	358
3. Percent incremental accounts	6.83	8.04	2.59
4. Amount of incremental deposits (Tk. 000)	91	138	83
5. Average size of incremental deposits (Tk. 000)	0.83	0.95	0.89
6. Total value of deposits at beginning of experiment (Tk. 000)	1,147	3,387	4,041
7. Percent incremental deposits	7.93	4.07	2.05
8. Interest receivable on incremental monthly produce (Tk. 000)	226	319	167
9. Incremental interest receivable (Tk.)	2,355	3,353	1,739
10. Interest payable on incremental monthly product (Tk. 000)	140	226	82
11. Incremental interest payable (Tk.)	1,376	1,985	571
12. Net Interest Income (8-10) (Tk.)	979	1,338	1,168
13. Incentive bonus paid (Tk.)	470	1,370	620
14. Field Assistant's incidental expenses (Tk.)	—	900	—
15. Net incremental income (loss) (Tk.)	509	(932)	548
16. Rate of return (%)	27.57	(21.90)	46.01
17. Incentive cost per incremental Taka mobilized (excludes interest costs) (Tk.)	0.005	0.016	0.007
18. Incentive cost per incremental account mobilized (excludes interest costs) (Tk.)	4.31	15.76	6.66

[a] At the beginning of workday on February 1, 1986.

[b] Assuming agrani Bank's annual rate of interest on interbranch funds: 12.5%

[c] Rate of return = (net incremental income/total incremental costs) * 100.

APPENDIX I

Methodology for Evaluating the Rural Deposit Mobilization Experiment

I. Costs of Funds

a) Interest Costs:

The normal interest paid by the branches to depositors was calculated using the procedure normally followed by the bank. The interest paid depends on the minimum monthly products of the accounts in each month. Deposit balances, as of the 6th day of the month, if not followed by any withdrawal in the month, or the minimum balance held in the account as a result of transactions in that month, form the minimum monthly product of a deposit account. This minimum monthly product is multiplied by 1/12 of the respective interest rates for different types of accounts to calculate the normal interest accruing to the depositors' accounts for the month. Accounts with balances below Taka 100, however, are not paid any interest.

b) Bonuses:

The bonuses paid to the depositors under the Tangible Incentive Model were calculated at the rate of 1% on the minimum amount of new/additional deposits maintained for 3 months in the bank branch. The amount of bonuses paid to the hired Field Assistants under the Marketing Model and to the employees of the branches under the Employee Incentive Model were calculated at the rate of 1% of the minimum balance of deposits generated by the FA or employee of the branch. The amount of deposits mobilized by the FA or employee during the experiment period are identified by the minimum deposit

balance maintained by the depositors introduced by the FA or employee during the experiment period as recorded in specified forms.

c) Total Costs:

The total cost of the minimum balances held for the specified period (3 months) under the different models was calculated by adding the amount of bonuses and the monthly remuneration of Tk. 150 to the FAs, the bonuses paid to the employees and depositors, and the amount of normal interest paid by the bank to the depositors. Thus, the total cost of collecting and holding the deposits under the experiment may be written as follows: Total Cost = Interests + Bonuses + monthly remuneration to each FA (in the case of the Marketing Model only).

II. Income from funds:

Income from the total deposits collected and retained for the minimum specified period (3 months) under all models of the experiment was calculated from the monthly products of the ending balances of each account at the end of the month. We used the interest rate at which the branches lent their funds to the head office. An annual interest rate of 12.5% was used for the total monthly balances of the deposit accounts brought in under the experiment to determine the income from the deposits collected under the experiment. No reserve requirement was applied to these deposits as branches are not liable for maintaining reserves. It is the responsibility of the Bank's head office acting through the principal branch to adhere to the reserve requirement of the bank by counter-balancing the average of the other branches' reserve position.

APPENDIX II

Distribution of Accounts by Number of Deposits by Opening Balance

Opening Balance	Range of Number of Deposits[a]				Total Number of Deposits
	0-1	2-5	6-10	10+	
Tk. 100 or less	445	159	9	5	365
Tk. 101-500	48	40	2	1	90
Tk. 501-1,000	27	7	1	--	21
Tk. 1,001-5,000	41	13	2	--	36
Tk. 5,001-10,000	16	3	--	--	3
Tk. over 10,000	22	4	--	--	5

[a] Excludes initial deposit transaction when account was opened.

APPENDIX III

Distribution of Accounts by Number of Withdrawals by Opening Balance

Opening Balance	Range of Number of Withdrawals				Total Number of Withdrawals
	0-1	2-5	6-10	10+	
Tk. 100 or less	603	11	3	1	99
Tk. 101-500	80	11	--	--	39
Tk. 501-1,000	29	5	1	--	22
Tk. 1,001-5,000	44	10	2	--	48
Tk. 5,001-10,000	18	1	--	--	7
Tk. over 10,000	24	2	--	--	11